

AERO-MOTIVE COMPANY

A Woodhead Industries, Inc. Subsidiary



## **IMPORTANT SAFETY INSTRUCTIONS**

Please read this manual carefully and follow its instructions. Improper use or failure to follow these instructions could result in serious injury, death or property damage. Operators should be instructed in the safe and proper use and maintenance of this product. Keep this manual for future reference.

The following safety precautions call attention to potentially dangerous conditions.



**DANGER:** Immediate hazards which **WILL** result in severe personal injury or death.



**WARNING:** Hazards or unsafe practices which **COULD** result in severe personal injury or death.



**CAUTION:** Hazards or unsafe practices which **MAY** result in *minor* personal injury or product or property damage.

**NOTE:** Instruct operators in the safe, proper use and maintenance. Keep this manual for future reference.

## **INSTALLATION**



**WARNING:** Failure to read, understand, and follow these instructions may result in hazards or unsafe practices **COULD** result in severe personal injury or death.



**CAUTION:** Operators need to be instructed on the safe, proper use and maintenance of this product. Keep this manual for future references. Hazards or unsafe practices **MAY** result in *minor* personal injury or product or property damage.

## **MOUNTING**

Some reels come complete with hose and are set at proper tension, ready to install. The fixed base of the reel allows mounting in several different positions including base up, base down, or wall mounted. Here are general mounting requirements:

- Main-shaft must be horizontal.
- Centerline of the spool assembly must be in-line with the hose pull out.
- When mounted overhead in base up position, add a secondary chain, bracket or other safety device to prevent reel from falling in case the mounting bolts are removed or become loosened from vibration.

## **SECONDARY SUPPORT CHAIN**



**DANGER:** A secondary safety cable or chain is to be attached to all reels mounted overhead to prevent reel from falling. Immediate hazards **WILL** result in severe personal injury or death.

All reels mounted over head should have a secondary support chain to protect personnel in case of structure or mounting component failure. Attach one end of secondary support chain or cable to secondary support point on reel. Attach other end of secondary support chain or cable to the reel. The chain or cable should be as short as possible allowing reel to drop no more than 6 to 12 inches if the primary connection is released.

## **SUPPLY HOSE**

Assemble supply hose to main-shaft. **Do not** use rigid pipe at input connection. Use Teflon tape or pipe sealant to reel hose fitting threads.

## **ADJUSTMENT**

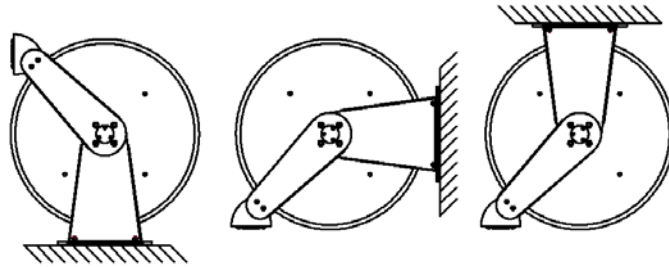
### **RATCHET LOCK**

**CAUTION:** To avoid damage to the reel or personnel, always hold on to the hose while it is rewinding. Hazards or unsafe practices which MAY result in *minor* personal injury or product or property damage.

Ratchet lock works with reel mounted in any position and needs no adjustment. Check reel for correct operation by slowly pulling out the hose. A “clicking” noise will be heard every half revolution of drum. To latch reel, pull out hose and allow it to retract after the first, second, or third “click”. To unlatch, slowly pull out hose until the “clicking” noise stops, then let hose retract until the hose stop rests against hose guide. To disable, ratchet parts must be removed.

### **HOSE GUIDE ARM ADJUSTMENT**

For maximum hose life, adjust guide arm so that the hose payout is in-line with guide assembly (see illustration below). Guide arm is adjustable to two positions. To adjust guide arm, remove screws, and rotate guide arm 90 degrees to next group of mounting holes in stand assembly.



### **TENSION ADJUSTMENT**

**CAUTION:** Failure to test for adequate spring revolutions can cause damage. Hazards or unsafe practices MAY result in *minor* personal injury or product or property damage.

**NOTE:** Pull hose out completely to insure enough spring revolutions remain for operating. Always leave at least 1-2 turns between full extension and when the spring is wound tight (bottomed out). If entire hose assembly cannot be pulled out, decrease spring tension until full extension is possible.

Reels shipped with hose installed are pre-tensioned at the factory. Reels shipped without hose require pre-tensioning after hose is installed but *before* making final hose connections. To pre-tension hose reel, pull hose out to allow one full wrap of hose to be looped back around drum assembly. Engage ratchet, remove ball stop, and loop hose back around drum. Repeat steps until desired tension is achieved. After tension is set, pull hose out completely to check spring travel. If full hose extension is not possible, remove pre-tension turns until full hose extension is possible. Failure to test in this manner may cause spring damage. Complete all hose connections.

## **SERVICE**


**WARNING:** Before performing any service, always disconnect and lock out compressed air or fluid, and remove all spring tension before attempting any service. Hazards or unsafe practices COULD result in severe personal injury or death.

### **HOSE INSTALLATION AND REPLACEMENT**

Remove all tension from reel (see Tension Adjustment). Remove ball-stop, unwind hose on reel, and disconnect hose from swivel. Feed new hose through roller guide and through slot in flange. Then connect hose to swivel (use Teflon tape or thread sealant), wind onto drum assembly, and re-tension reel.

---

## MAINSRING ASSEMBLY REPLACEMENT

 **WARNING:** Never, under any circumstances, remove spring from its container. Replacement springs are assembled in a sealed assembly for safety and there is no need to remove them. Serious injury or death could result from removal of spring from its container assembly.

**NOTE:** Main-spring is completely self-contained and safe to handle. If spring is to be replaced when not broken make sure to remove all tension from reel before proceeding.

If reel will not develop tension or retract hose, the main-spring spool assembly will need to be replaced.

To replace main-spring spool assembly:

- Turn off or lockout air/fluid supply to reel and disconnect supply hose
- Remove reel from mounting and relocate to bench-top
- Pull hose out completely to expose interior of drum
- Remove roller guide arms on each side of reel
- Disassemble shaft support plate from Base
- Remove stand, bearing cup, and bearing on side opposite of fluid path
- Remove drum flange stand and spring hub on spring side of reel
- Remove main-spring spool assembly
- Reverse procedure to add new spring assembly
- Re-tension reel as in "Tension Adjustment"

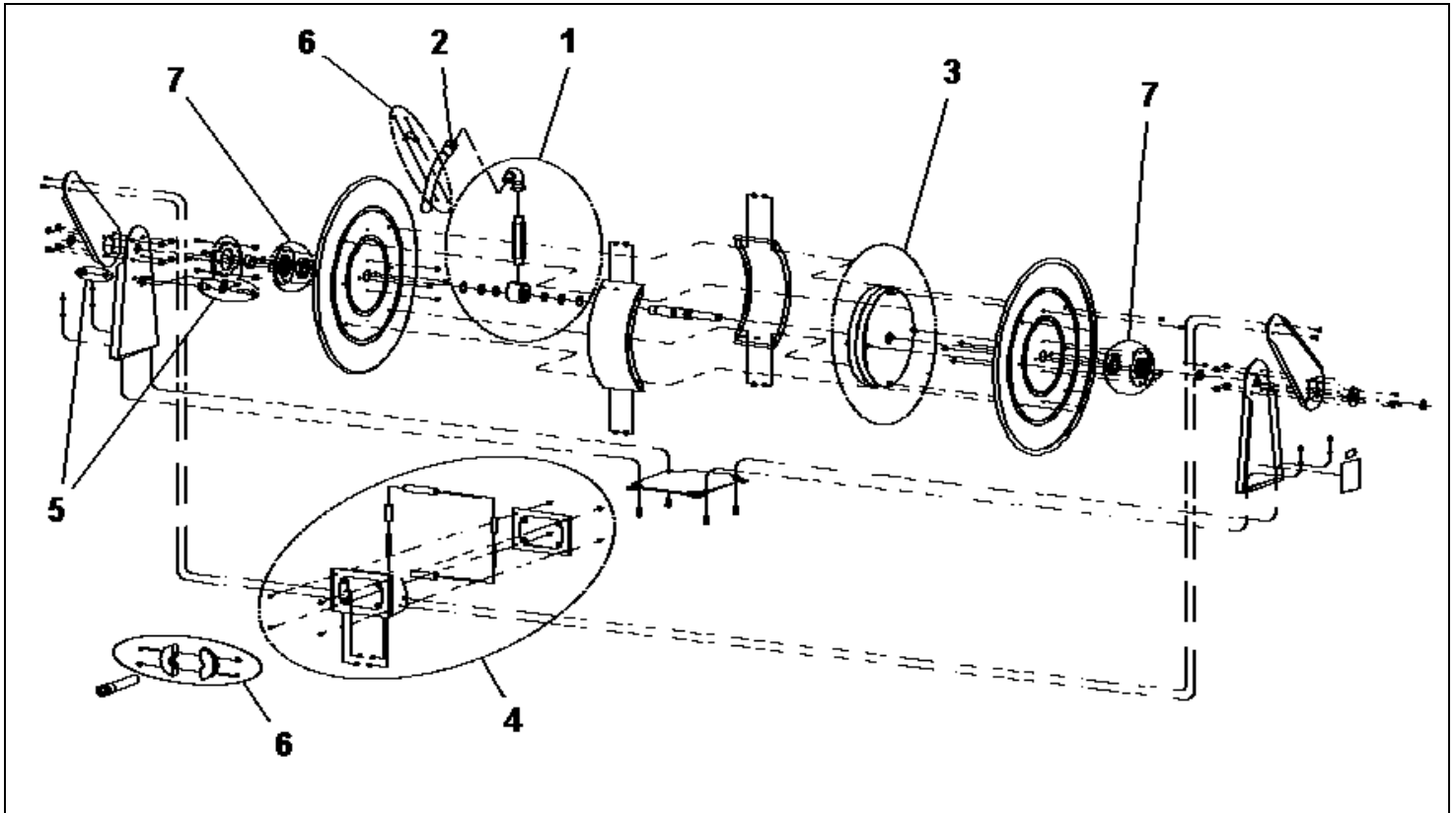
## SWIVEL REPLACEMENT

**NOTE:** Swivel only sold as complete assembly. If o-rings are leaking, complete swivel must be replaced. You may test for leaks using soapy water.

To replace swivel:

- Turn off or lockout air/fluid supply to reel and disconnect supply hose from inlet on shaft
- Remove reel from mounting and relocate to bench-top
- Remove all tension from reel (see Tension Adjustment)
- Remove hose from drum and disconnect from swivel
- Remove retaining rings from both sides of mainshaft
- Remove roller guide arms and stand from fluid inlet side
- Remove swivel and mainshaft from assembly
- Reverse above procedure and install new swivel and mainshaft (use Teflon tape or thread sealant on NPT connections)

## REPLACEMENT PARTS



**NOTE:** The DC series reels have common wearing components available as replacement parts. If the part you need is not found on this list, a new reel may be your best alternative.

Reference Items	Part Number	Qty.	Description
3	H41220157	1	Spring Assembly for DC400, DC410
	H41220158		Spring Assembly for DC475, DC600, DC660, DC800, DC850
1	H72320064	1	Swivel Assembly for DC4XX
	H72320065		Swivel Assembly for DC6XX
	H72320066		Swivel Assembly for DC8XX
2	H71130037	1	Hose Assembly for DC475 (1/2" ID x 75 ft)
	H71130038		Hose Assembly for DC410 (1/2" ID x 100 ft)
	H71130039		Hose Assembly for DC665 (3/4" ID x 60 ft)
	H71130040		Hose Assembly for DC850 (1" ID x 50 ft)
5	H46220006	1	Ratchet Kit
4	H44110029	1	Roller Guide Kit
6	H73130047	1	Hose Stop Kit for 1/2" Hose
	H73130048		Hose Stop Kit for 3/4" Hose
	H73130049		Hose Stop Kit for 1" Hose
7	H40210010	1	Bearing Kit

### Aero-Motive Company

**W** A Woodhead Industries Inc. Subsidiary  
 PO Box 2678  
 Kalamazoo, MI 49003-2678  
 USA  
 (269) 337 7700 / (800) 999 8559  
 FAX: (800) 333 6119  
[www.aeromotive.com](http://www.aeromotive.com)  
[techhelp@aeromotive.com](mailto:techhelp@aeromotive.com)

### Woodhead Connectivity LTD.

**W** A Woodhead Industries Inc. Subsidiary  
 Factory No. 9  
 Rassau Industrial Estate  
 Ebbw Vale Gwent NP23 5SD  
 United Kingdom  
 44-1495-356300  
 FAX: 44-1495-356301  
[sales@wdhd.co.uk](mailto:sales@wdhd.co.uk)

### Woodhead Asia PTE LTD.

**W** A Woodhead Industries Inc. Subsidiary  
 No. 4 Toh Tuck Link  
 Level 3 Mezzanine  
 Markono Logistics Bldg.  
 Singapore 596226  
 65-6-261-6533  
 FAX: 65-6-261-3588  
[sales@wasia.com.sg](mailto:sales@wasia.com.sg)

### Woodhead Canada LTD.

**W** A Woodhead Industries Inc. Subsidiary  
 1090 Brevik Place  
 Mississauga Ontario  
 L4W 3Y5 Canada  
 (905) 624-1079  
 FAX: (905) 624-9151  
[www.woodhead.ca](http://www.woodhead.ca)